

ATB – COLOR VISION TESTING

(DD Form 2808, Block 66. ‘COLOR VISION’) [As of: 1 May 2002]

Important notes concerning the new DD Form 2808.

The new DD Form 2808 has a pre-printed ‘PIP’ and a pre-printed ‘ /14’ in block 66. Although this is convenient for entering in the results of the Pseudo-Isochromatic Plate (PIP) color test, it is not intended to exclude other authorized color vision testing, such as the Farnsworth Lantern (FALANT) or the OPTEC-900 Color Vision Tester. If you do not use the PIP, line through the pre-printed entries and record the test used with the proper score. If you use the PIP and then also use another color vision test, record the PIP in block 66 and then record the additional color test findings in block 60 (Other Vision Test) or block 73 (Notes).

Purpose/Indications.

Mandatory for all initial FDMEs. This screens for color vision deficiencies.

Equipment.

PIP (Pseudo-Isochromatic Plates):

- Only the test which contains 14 test plates with numbers is authorized at this time (no traced lines). Most tests with 14 test plates also contain one or two ‘demonstration’ plates that can be seen readily, even in the presence of a color vision deficiency. Once the examinee understands the test with these demonstration plates, present the other 14 plates. Do not count the demonstration plates.
- The recommended source of illumination is the Macbeth Easel Lamp. However, the Daylight HRR Illuminator, “daylight” fluorescent bulb, other standard illuminant “C” light source, or other source providing a light source rating of C.R.I. 90 and 6200° Kelvin, may be used instead. If none of these are available, see the PIP Set-Up section below.

- or -

FALANT (Farnsworth Lantern) or the OPTEC 900-Color Vision Tester:

- The Farnsworth Lantern and the OPTEC-900 Color Vision Tester are equivalent for FDME test purposes.

Set-Up.

PIP (Pseudo-Isochromatic Plates):

- Place the light source (Macbeth Easel Lamp, Daylight HRR Illuminator, “daylight” fluorescent bulb, or other standard illuminant “C” light source) on a table or shelf so that the subject’s line of sight is at right angles to the plates, and so his/her eyes are at a distance of approximately 30 inches.
- If subject wears glasses for flight, test with glasses on.
- The subject should not face an open window or other strong light. Nearby incandescent lights (those with any yellow wavelengths) should be shielded (or off) so they do not illuminate the plates. Cover any nearby windows.
- If none of the recommended light sources are available, use regular room lighting but avoid any incandescent lights (yellow wavelengths). If the examinee fails in this case, you may do any of the following:
 - Retest using the FALANT or OPTEC-900 instead
 - Retest using light reflected from the north sky (sunny day)
 - Refer to clinic that has appropriate test lighting

FALANT (Farnsworth Lantern) or the OPTEC-900 Color Vision Tester:

- Test distance is eight (8) feet with the aperture facing the subject.
- If subject wears glasses for flight, test with glasses on.
- Give the test in a normally lighted room; screen from glare; exclude sunlight. Subject should not face the source of room illumination.

Step-By-Step Procedure.

PIP (Pseudo-Isochromatic Plates):

- Examiner instructs subject to, “Please read the numbers aloud” (or words to that effect). The subject is not allowed to trace the numbers or touch the test plates.
- Examiner must show the demonstration plate(s) first, then show the remaining 14 test plates, showing each for approximately 2-4 seconds. Do not count the demonstration plate(s) in scoring.
- With the exception of always showing the demonstration plate(s) first, the examiner may change the order of the plates if there is suspicion of memorization. However, do not ‘mix and match’ test plates from multiple tests. (In a multiple-subject environment, do not allow those waiting to test to overhear the responses to the PIP.)
- A patient is disqualified if there are five (5) or more errors on the PIP.
- Record the results as the number MISSED over the number possible. For example, a perfect score on the PIP would be:
 - ‘PIP 0/14 PASS’

FALANT (Farnsworth Lantern) or the OPTEC-900 Color Vision Tester:

- Instruct the patient that he/she will be seeing sets of two lights in combinations of the colors red, green, and/or white. The lights are oriented vertically and the subject is to respond with the colors seen in order from top to bottom.
- It is advisable to provide the subject with a 'trial set' to allow the patient to understand the test before proceeding; do not record this set.
- Present nine (9) pairs of light sets. The first set presented should be a RED-GREEN or GREEN-RED combination but the remaining eight sets should be in random order. Each set of lights should be presented for approximately two (2) seconds.
- An error is considered the miscalling of one or both of a pair of lights. If an examinee changes the response before the next light is presented, record the second response only.
- A patient is disqualified if he/she misses any of the nine (9) presentations.
 - A retest with an additional 18 light pairs is no longer authorized for FDMes. See note at bottom of page. 'Grandfathering' this test may be possible but only with supplemental information from Optometry or Ophthalmology and final approval authority from Commander, US Army Aeromedical Center (USAAMC). It will in no case be 'grandfathered' for any Class 1/1A FDME.
- Record the results as the number MISSED over the number possible. For example, a perfect score on the FALANT or OPTEC 900 would be:
 - 'FALANT 0/9 PASS'
 - 'OPTEC-900 0/9 PASS'

Refer to Eye Clinic if subject fails color vision testing:

- misses five (5) or more of 14 test plates with PIP,
 - and/or -
- misses any of nine (9) test light pairs with the FALANT or OPTEC 900

[Note: The FALANT / OPTEC-900 retest with an additional 18 light pairs is no longer authorized for FDMes. 'Grandfathering' this test may be possible but only with supplemental information from Optometry or Ophthalmology and final approval authority from Commander, US Army Aeromedical Center (USAAMC). It will in no case be 'grandfathered' for any Class 1/1A FDME.